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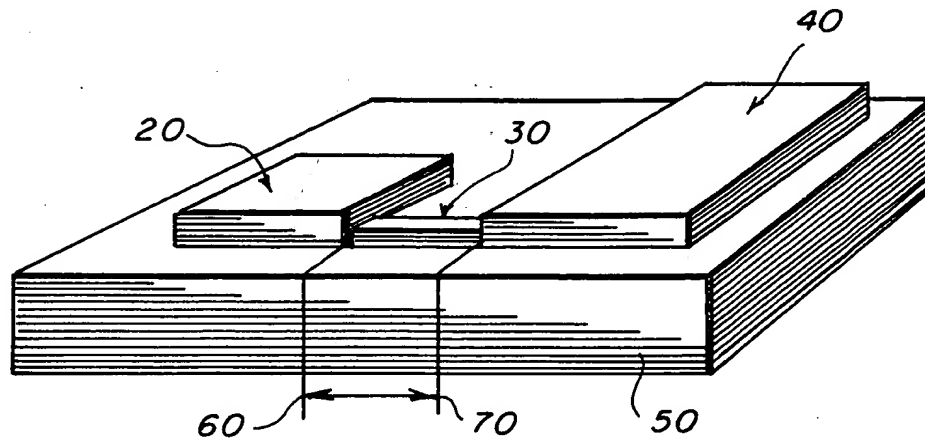
Inventors: Wood et al.  
Serial No. 09/813858

**PATENT APPLICATION**  
Navy Case No. 79,849

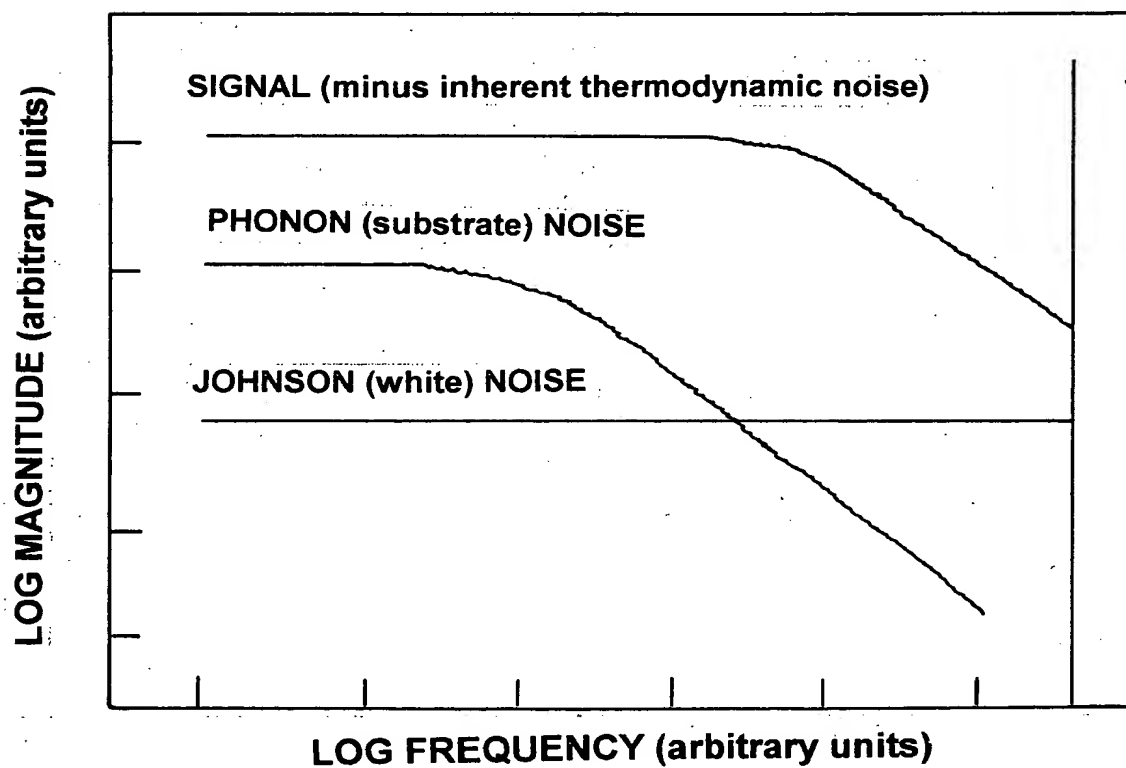
### **Appendix**

See Substitute Formal Drawings

See Duplicate IDS



**FIG. 1**



**FIG. 2**

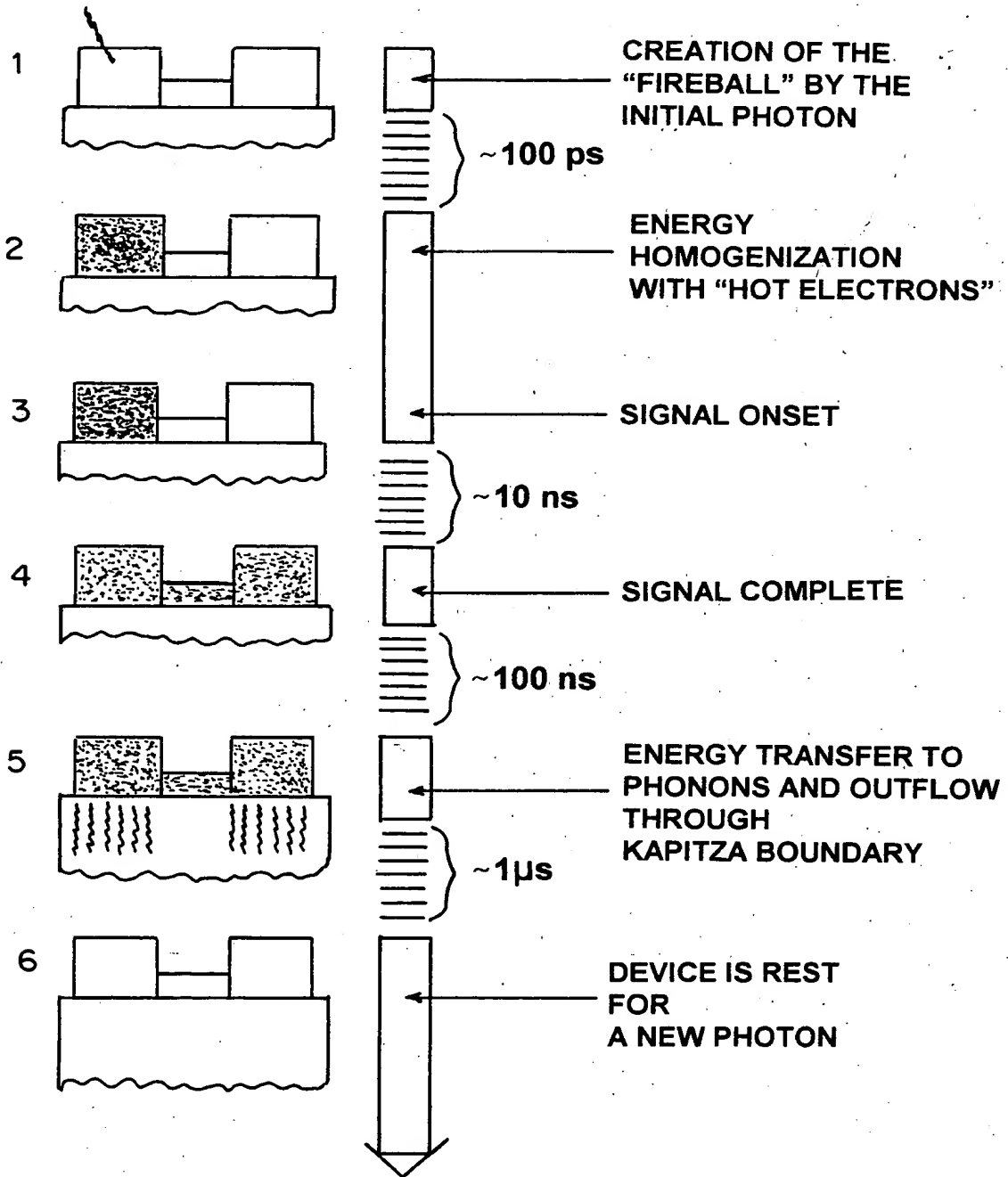


FIG. 3

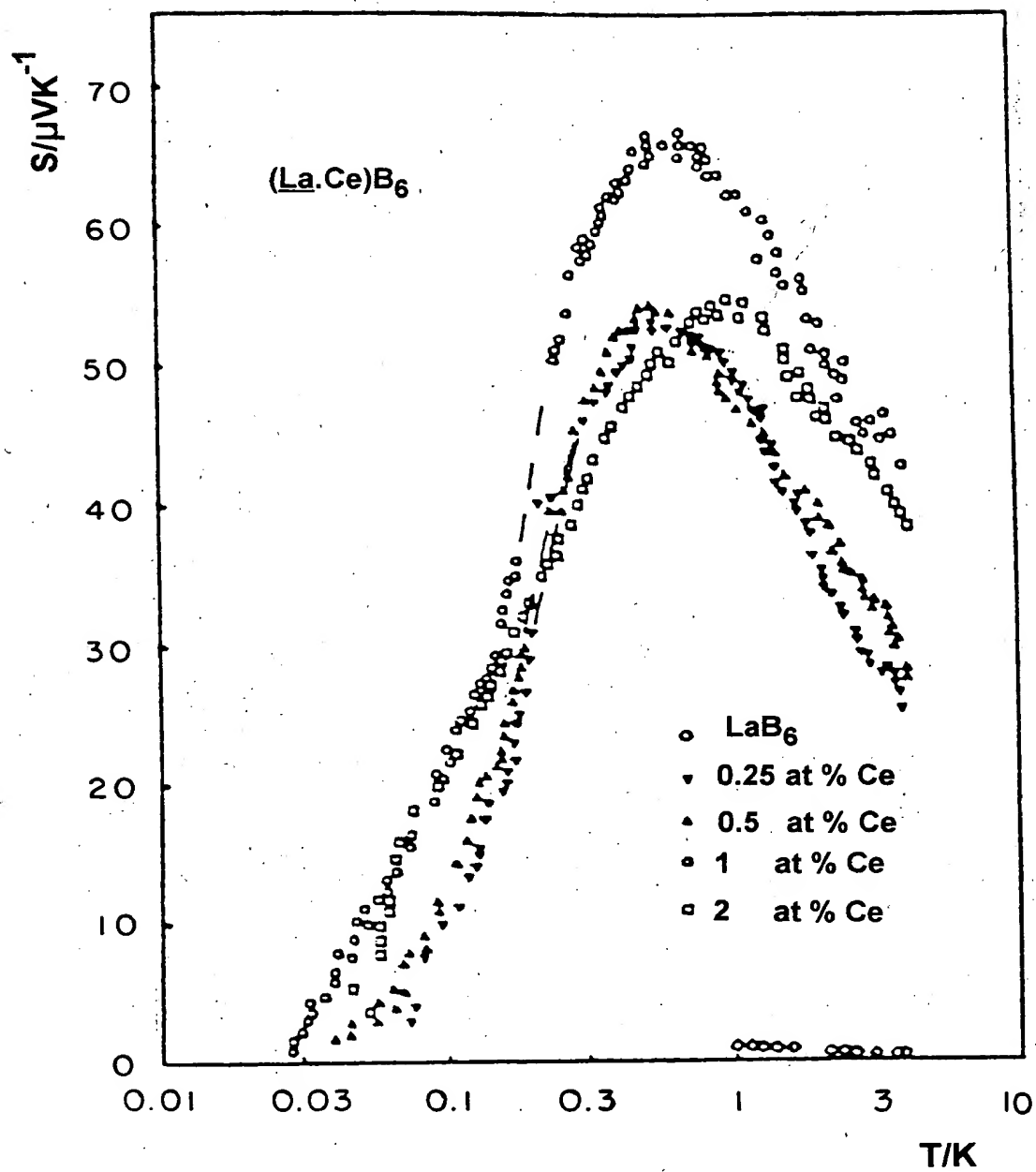


FIG. 4a

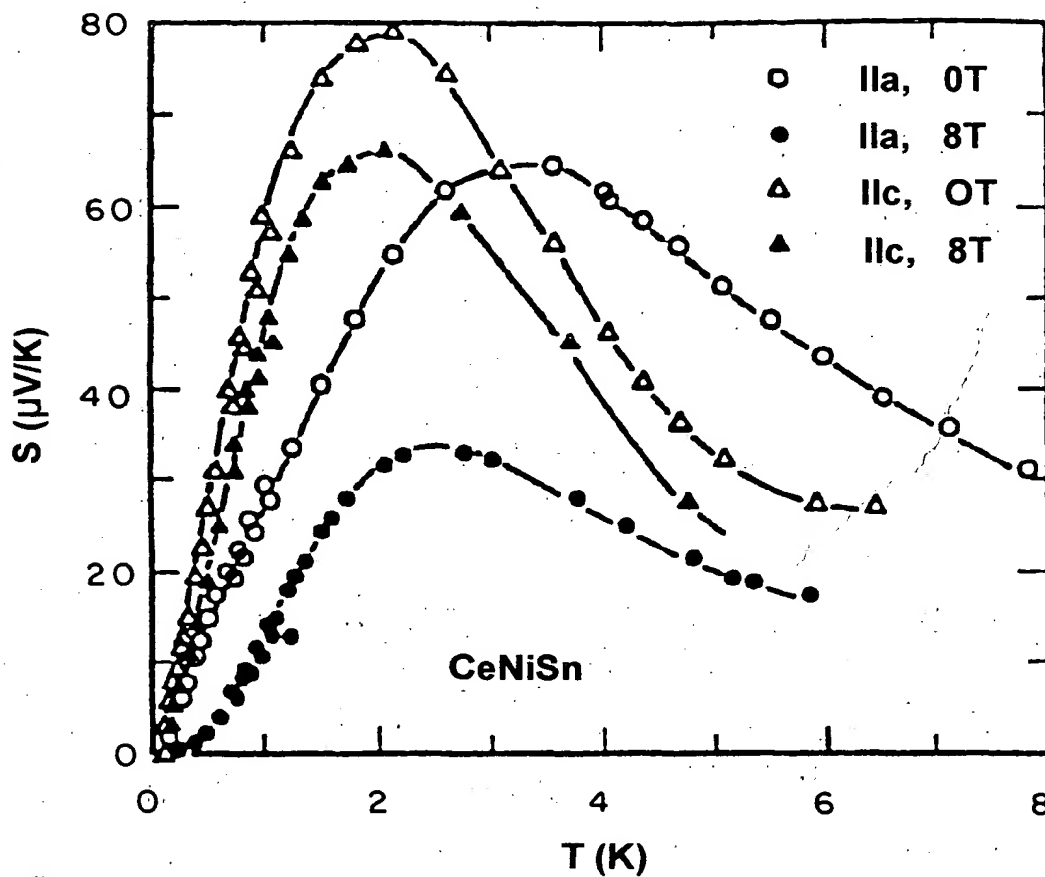


FIG. 4b

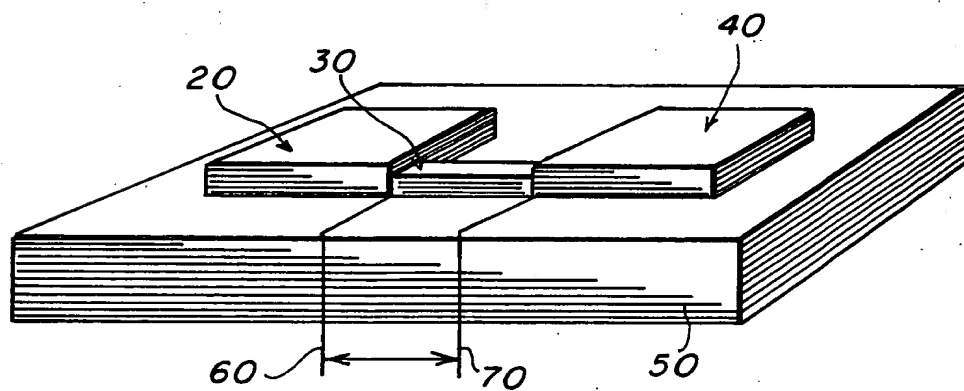
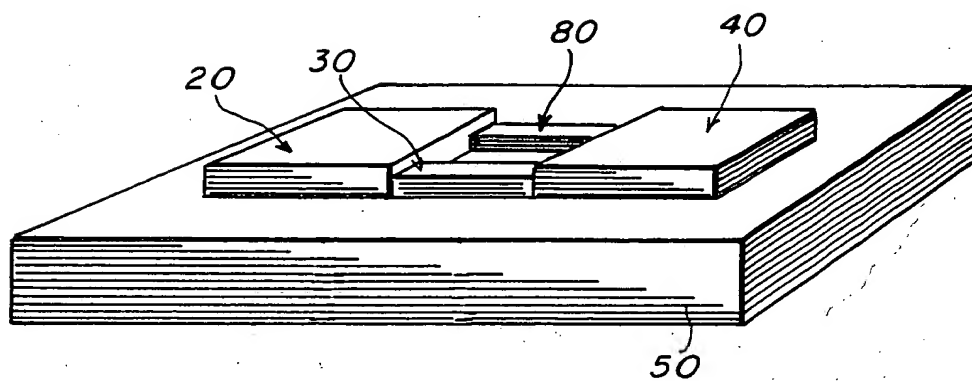
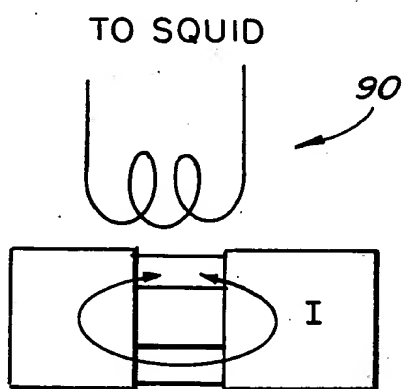


FIG. 5



**FIG. 6a**



**FIG. 6b**

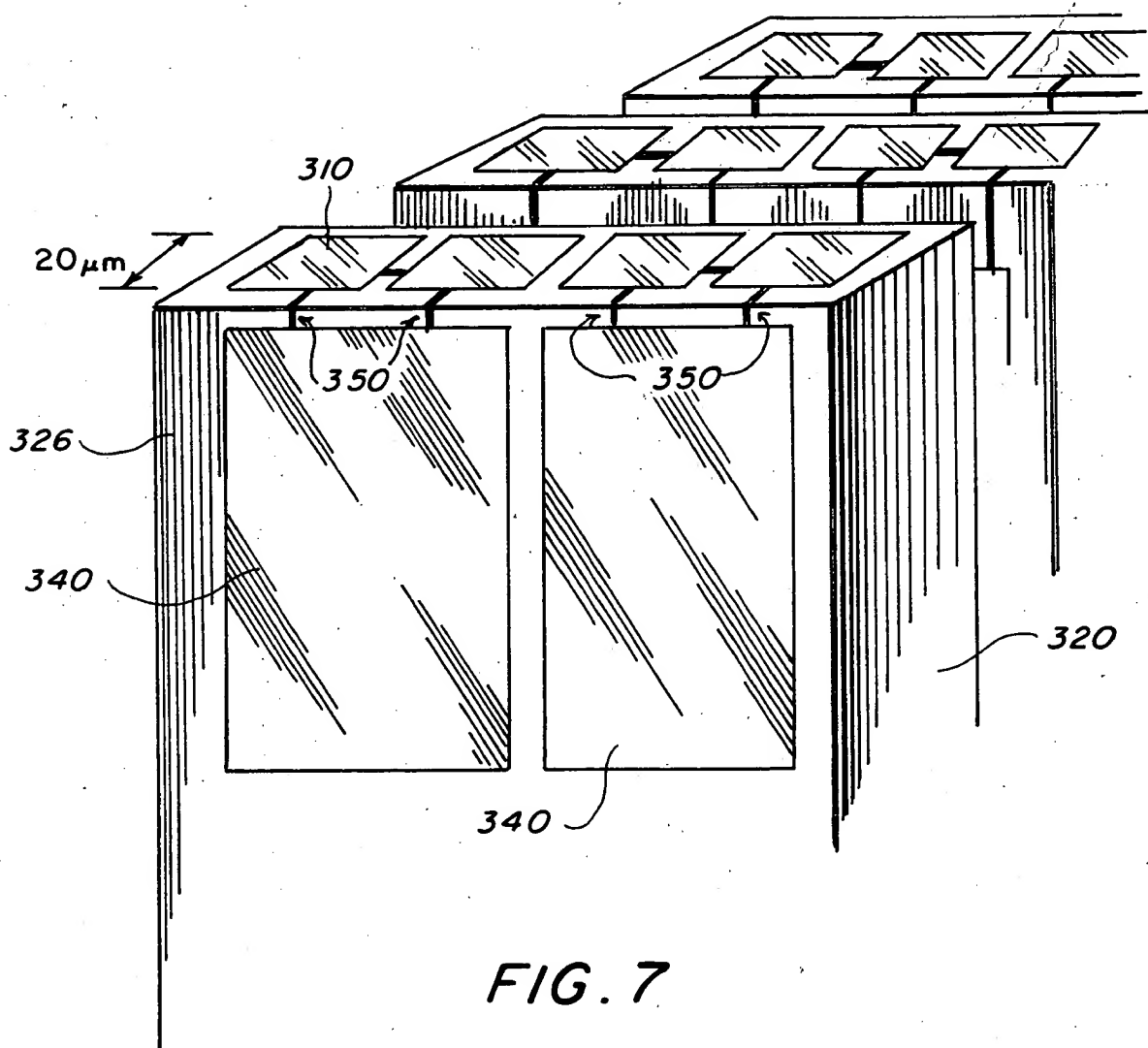


FIG. 7



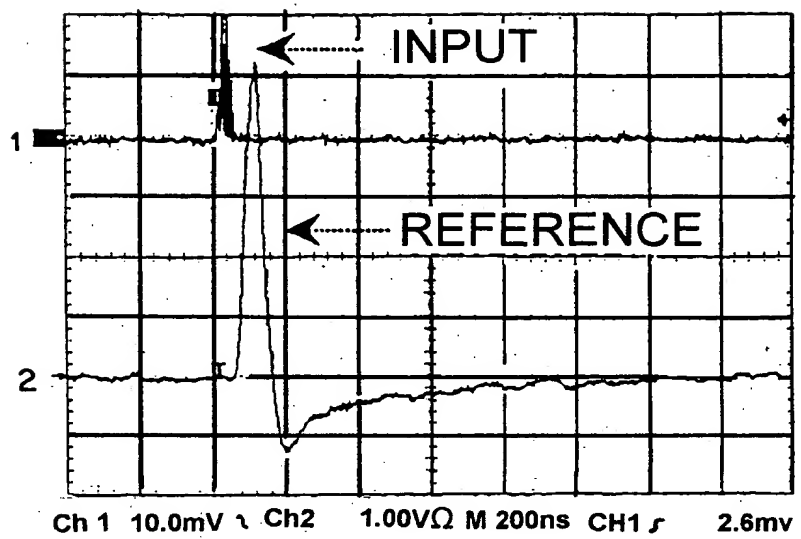


FIG. 8a

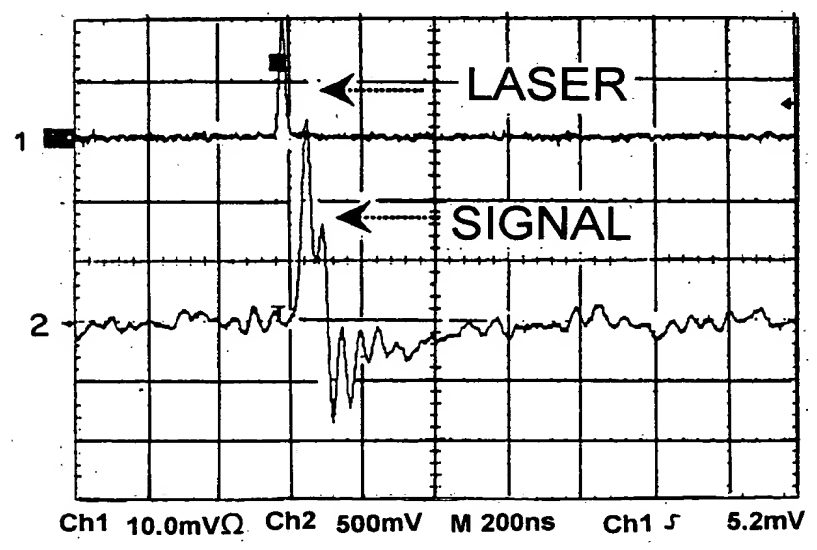
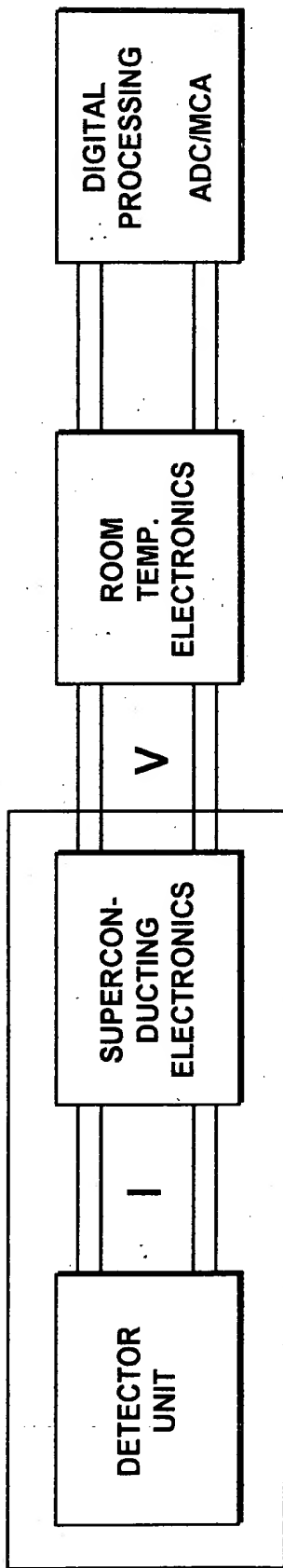


FIG. 8b



**COLD STAGE**



**FIG. 9**

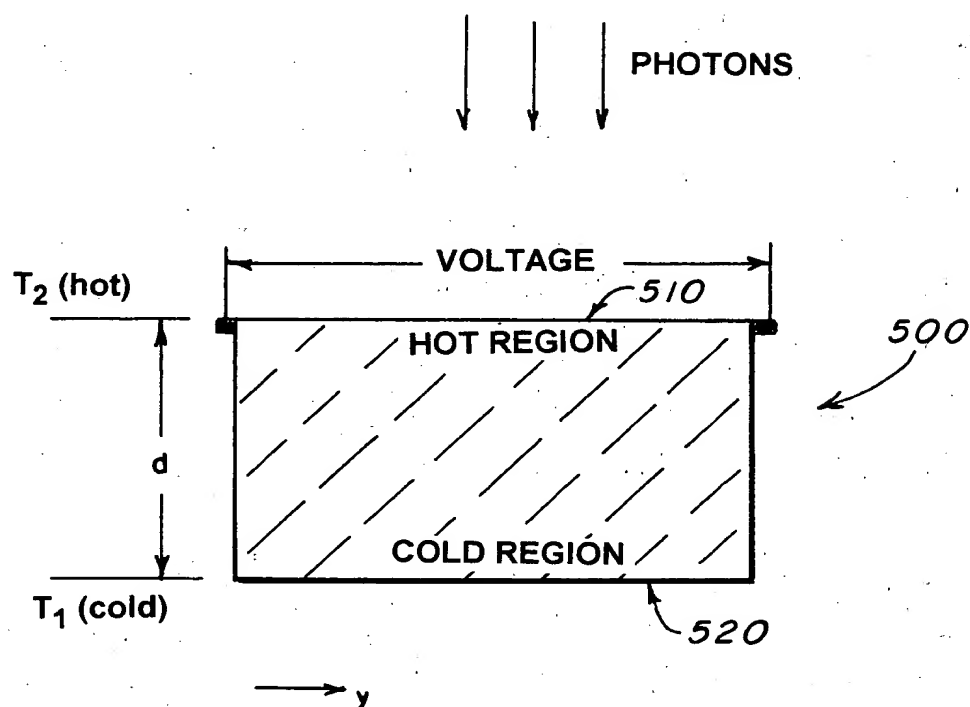


FIG. 10

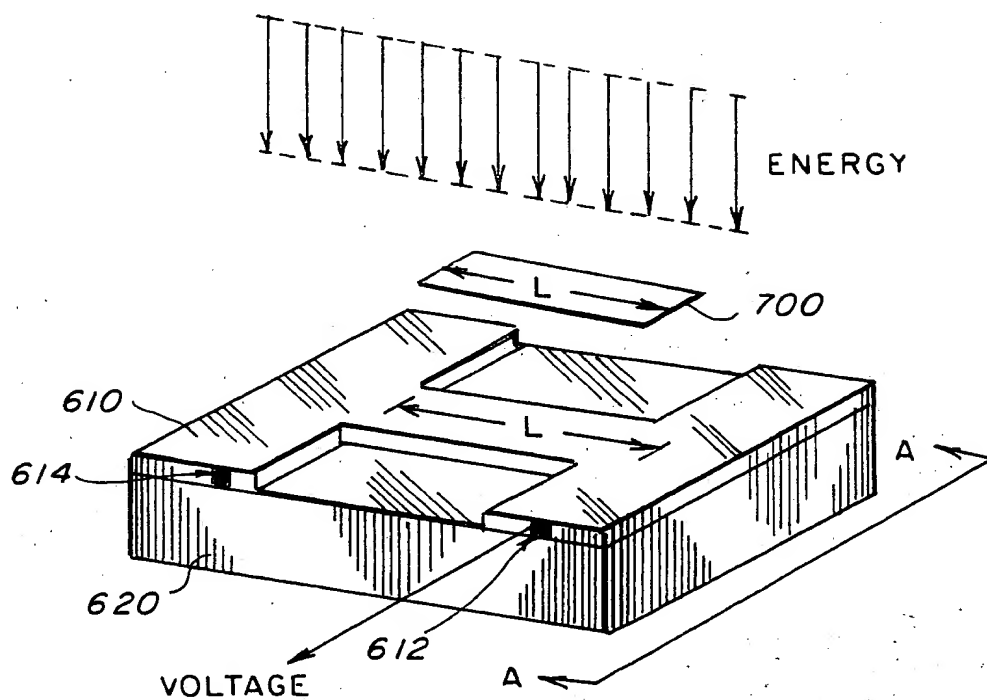


FIG. 11a

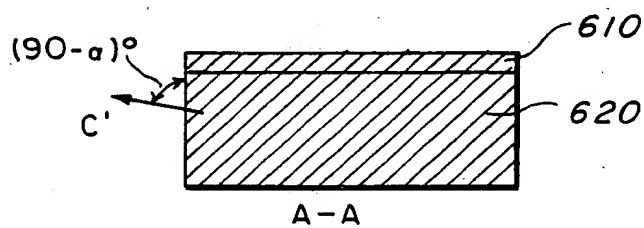


FIG. 11b

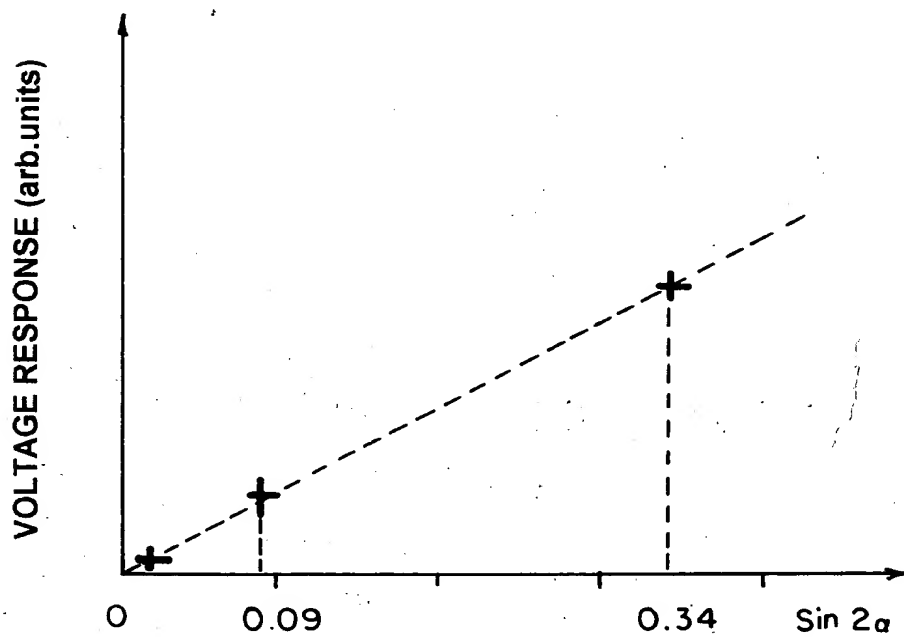


FIG. 12

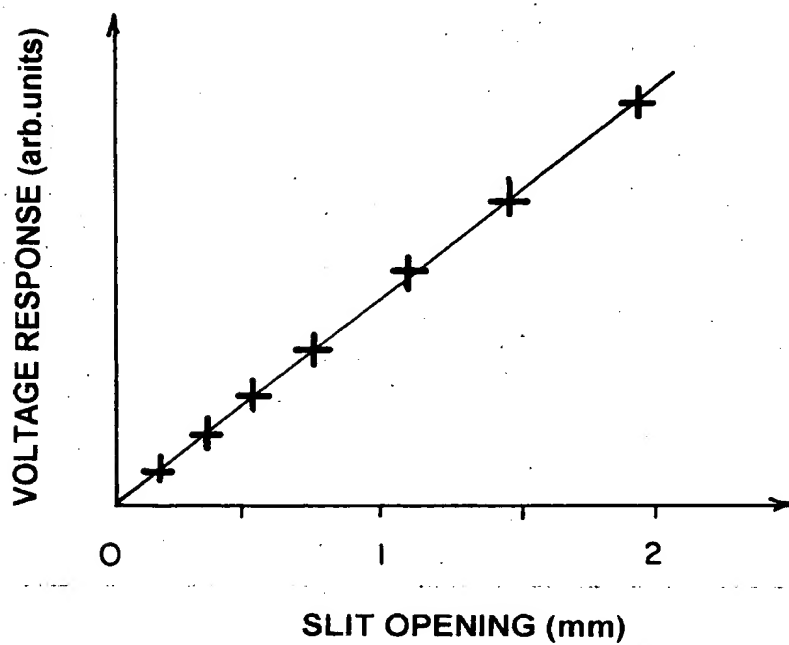


FIG. 13

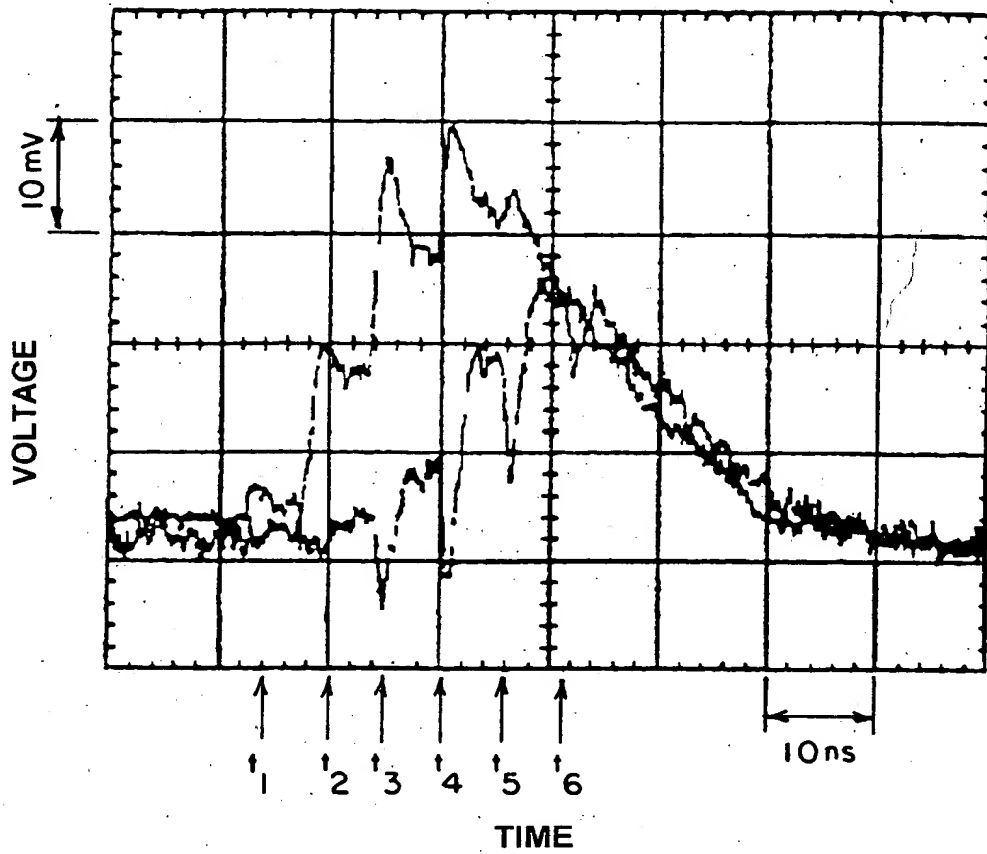


FIG. 14

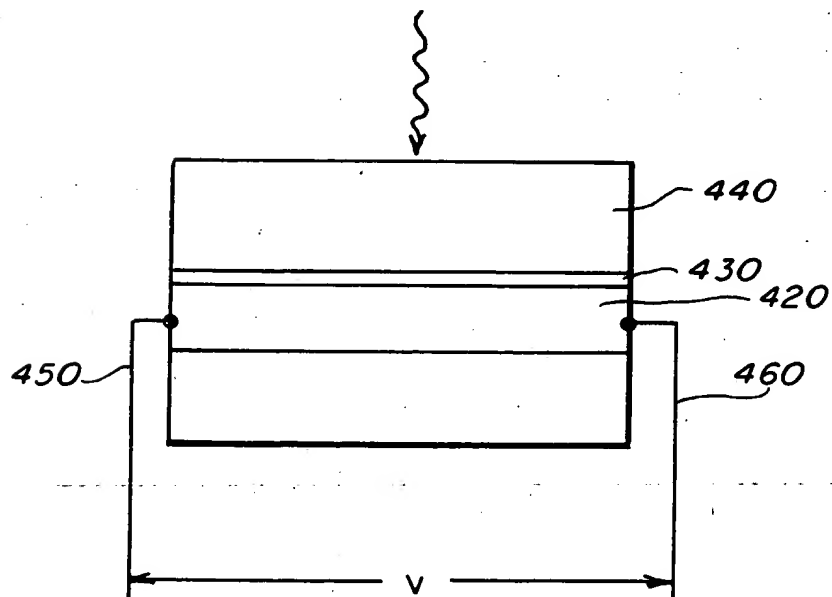
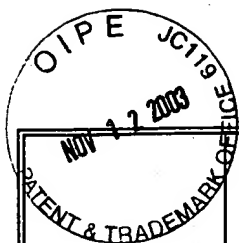


FIG. 15





	D. Van Vechten, K. Wood, G. Fritz, J. Horwitz, A. Gyulamiryan, A. Kuzanyan, V. Vartanyan, A. Gulian, "Imaging Detectors based on Anisotropic Thermoelasticity", Nuclear Instruments and Methods in Physics A 444 (2000) 42-45. Publication date April 11, 2000
	D. Van Vechten, K. Wood, G. Fritz, A. Gyulamiryan, V. Nikogosyan, N. Giordano, T. Jacobs, A. Gulian, "Thermoelectric Single Photon Detectors: Isotropic Seebeck Sensors" IEEE 18 <sup>th</sup> International Conference on Thermoelectrics (1999), pp 478-480.
	A.M. Gulian, D. Van Vechten, K.S. Wood, G.G. Fritz, J. Horwitz, M.S. Osofsky, J.M. Pond, S.B. Qadri, R.M. Stroud, J.B. Thrasher, V. Vartanyan, A.S. Kuzanyan, V.R. Nikogosyan, A.L. Gyulamiryan, "Imaging Detectors based on the Response of Anisotropic Layered Materials", IEEE Transactions on Applied Superconductivity, Vol 9, No. 2, June 1999, pp. 3194-3197.
	G.G. Fritz, K.S. Wood, D. Van Vechten, A.L. Gyulamiryan, A.S. Kuzanyan, N. Giordano, T.M. Jacobs, H.-D. Wu, J.S. Horwitz, A.M. Gulian, "Thermoelectric Single-Photon Detectors for X-ray/UV Radiation", X-Ray and Gamma Ray Instrumentation for Astronomy XI, K.A. Flanagan, O.H.W. Siegmund, eds., Proc. SPIE Vol 4140 (Aug 2000), 459-469.
	E.V. Osipov, A. Aulas, "Nature of Thermoelectric Anisotropy in Semiconductors at the lower temperatures", IEEE 16 <sup>th</sup> International Conference on Thermoelectrics (1997)
	A.J. Miller, B. Cabrera, R.M. Clarke, E. Figueroa-Fleliciano, S. Nam, R.W. Romani, "Transition Edge Sensors as Single Photon Detectors", IEEE Transactions on Applied Superconductivity, Vol 9, No. 2, June 1999, pp. 4205-4208.
	K.D. Irwin, S.W. Nam, B. Cabrera, B. Chugg, G.S. Park, R.P. Welty, J.M. Martinis, "A Self-Biasing Cryogenic Particle Detector Utilizing Electrothermal Feedback and a SQUID Readout", IEEE Transactions on Applied Superconductivity, Vol 5, No. 2, June 1995, pp. 2690-2693.

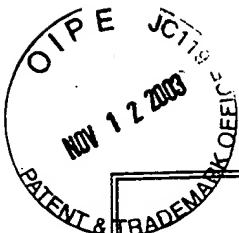
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	A.M. Gulian, D. Van Vechten, K.S. Wood, G.G. Fritz, J. Horwitz, M.S. Osofsky, J.M. Pond, S.B. Qadri, R.M. Stroud, J.B. Thrasher, V. Vartanyan, A.S. Kuzanyan, V.R. Nikogosyan, A.L. Gyulamiryan, "Imaging Detectors based on the Response of Anisotropic Layered Materials", IEEE Transactions on Applied Superconductivity, Vol 9 No. 2, June 1999, pp. 3194-3197.
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